Title: Improving Aircraft Safety and Reliability by Aircraft Maintenance Technician Training

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Abstract: (Your abstract must use Normal style and must fit in this box. Your abstract should be no longer than 300 words. The box will ‘expand’ over 2 pages as you add text/diagrams into it.)

Preparation of Your Abstract
1. The title should be as brief as possible but long enough to indicate clearly the nature of the study. Capitalise the first letter of the first word only (place names excluded). No full stop at the end.
2. Abstracts should state briefly and clearly the purpose, methods, results and conclusions of the work.

Introduction: Clearly state the purpose of the abstract.

Methods: Describe your selection of observations or experimental subjects clearly.

Results: Present your results in a logical sequence in text, tables and illustrations.

Discussion: Emphasize new and important aspects of the study and conclusions that are drawn from them.

Introduction: Aircraft maintenance is one of the primary causes or contributing factors in aircraft accidents. It is clear that proper training of Aircraft Maintenance Technicians (AMTs) will avoid failures, reduce maintenance related accidents, improve safety and reliability in aviation and provide recovery of the increasing demand to qualified AMTs for sustainability of the market growth.

This study, funded by Boeing’s Global Corporate Citizenship program, offers a training model developed in accordance with European Safety Agency (EASA) Part-66 requirements and delivered by e-learning methods.

Methods: Paper starts with reviewing literature to emphasize the contribution of maintenance on aircraft accidents and importance of AMT training. Afterwards EASA based AMT training system in EU states (and non-EU states implementing EASA rules) has been analysed. Finally a training model developed in accordance with EASA Part-66 requirements and delivered by e-learning methods has been introduced.

Results: The analysis of the training process based on EASA regulations showed that this process was based on the candidate’s demonstration of knowledge and acquisition of experience. The required experience depends on the training background of the candidate. This system is summarized in the figure below.
Field exercise showed that developed e-learning training model succeeded to improve the attendees’ theoretical knowledge level. Students and teachers of vocational schools, the employees of maintenance organisations preparing for knowledge examinations and shortly anybody aiming to become an AMT can benefit from this model which overcomes the disadvantages of traditional face to face training models.

Discussion:
This paper concludes that a training model, developed in accordance with Part-66 requirements and delivered by e-learning methods, when combined with the practical trainings given to AMT candidates in maintenance organisations during their experience periods, will be very successful in improving safety and reliability in aviation maintenance operations.